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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,604	03/31/2004	Thomas Palmieri	2006P26237 US	4357

28524 7590 04/06/2009  
SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER
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WRIGHT, PATRICIA KATHRYN

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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04/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,604	<b>Applicant(s)</b> PALMIERI ET AL.	
	<b>Examiner</b> P. Kathryn Wright	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Status of the Claims*

1. This action is in response to papers filed January 05, 2009. Applicant's arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections, and new grounds for rejection. Any objection/rejection not repeated herein has been withdrawn by the Office.

Pursuant to the petition decision, mailed January 22, 2009, claims 39-47, which were previously withdrawn from consideration as a result of a restriction requirement are hereby rejoined and fully examined for patentability. Because all claims previously withdrawn from consideration have been rejoined, the finality of the Office action mailed on June 04, 2008 is hereby withdrawn.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "means for holding" and "means for moving" in the transport device of claim 27; "means moving" in the transfer station of claim 27, "vessel holding means" in claim 27; "means for holding" and "means for moving", the transfer station "means for moving " in claim 31, "means for delivering" in claim 32; and "means for moving" the vessel holding means in claim 38.

The rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the **terms and phrases used in the claims must find clear support or antecedent basis in the description**

**so that the meaning of the terms in the claims may be ascertainable by reference to the description.” 37 CFR 1.75(d)(1).**

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 42-44 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between the transfer shuttle, the first projecting member, and the second projecting member. It is not clear from the claims how upon sliding the transfer shuttle, a first projecting member contacts a first test vessel, and a second projecting member contacts a second test vessel. How are these elements structurally connected?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 27-34, 38-39, 41 and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Carey et al. (US Patent no. 5,827,478), hereinafter “Carey”.

Carey teaches a multipath access system for use in an automated immunoassay analyzer. The Carey system comprises a transport device having means for holding a

plurality of vessels (cuvettes 84) having a plurality of vessel holding members (slots in cuvette ring; see for example col. 4, line 32 et seq. and col. 11, lines 18 et seq.). The transport device moves a plurality of vessels along one or more continuous loops via a bi-directional motor 18 (i.e., means for moving the vessel holding means; see for example col. 5, line 22 et seq. and col. 19, lines 1-11).

Carey teaches a transfer station positioned to slide in a direction perpendicular (i.e., vertical) to the horizontal direction the transport porter device (cuvette ring) rotates. The transfer station includes a “means for moving” or transfer shuttle 192 for moving the cuvette 84 in and out of the vessel holding means 62; see for example col. 18, line 56 et seq.

The system of Carey also includes a control system 25 programmed to determine the individual path along the continuous loop for each of the vessels, wherein the determination of each path is based on resource requirement (e.g., duration of incubation) associated with each vessel; see for example col. 4, line 7 et seq.

As to claim 31, the system of Carey includes a second transport device (second incubation chamber 12) like the first transport device (see col. 19, line 1 et seq.) The second incubation chamber will necessarily include all the elements of the first incubation chamber, including the transfer station positioned to slide in a direction perpendicular (i.e., vertical) to the horizontal direction of the transport porter device (cuvette ring) and shown in detail in Fig. 7. The second transfer station necessarily includes a second “means for moving” or transfer shuttle 190 for moving the cuvette 84 in and out of the second vessel holding means 62; see for example col. 18, line 56 et seq.

Regarding claim 32, the multi-path system of Carey also includes at least one delivery station 20/22 for adding a cuvette to the transport device at a specified vessel holding member of the plurality of vessel holding members (see fig. 3 and col. 4, lines 57 et seq.)

With respect to claim 33, the Carey system includes pipetting stations ( 24J-24m) for adding one or more reagents to a vessel positioned in a vessel holding member of the transport device (see col. 6, line 65 et seq.)

As to claim 34, Carey also teaches wash stations 24 f-i for washing test vessels positioned therein.

With respect to claims 36-37, Carey teaches stationary (fixed) agitating means (re-suspend probes 24c and 24g) positioned adjacent the transport device at a location where the vessels in the holding members contact the agitating member when the transport device 213 is moved.

Claims 38 and 45-46 are to the process of operating the system. A recitation of function may not distinguish over the prior art reference since an apparatus claim covers what a device is, not what it does. See MPEP 2114. Nevertheless, as recited in claim 47, Carey teaches a controller 25 that is able to move and transfer the cuvette between one or more continuous loops 12. The controller determines an individual path along a first continuous loop for each of a plurality of samples based on a resource requirement (tests, operations, and/or assays) for each sample, optimizing the path determined for each sample such that samples having identical resource requirements travel an equal distance around the first continuous loop, wherein for at least one sample the equal distance comprises the sum of a first distance and a second distance,

wherein the first distance is traveled in a clockwise direction around the first continuous loop, wherein the second distance is traveled in a counterclockwise direction around the first continuous loop (col. 19, line 35 et seq.) Note that Carey teaches the path determined for at least one sample includes transferring the sample from the first continuous loop to a second continuous loop in the same manner the first continuous loop was employed (see for example 19, line 1 et seq.)

As to claim 41, Carey teaches wherein the transfer shuttle is positioned so that upon sliding in a direction perpendicular to a portion of the transporter device, a projecting member 192 contacts a test vessel held in a vessel holding means and pushes the test vessel from the transport device (see Fig. 7).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. (US Patent no. 5,827,478) in view of Babson et al. (US Patent no. 5,885,529), hereinafter "Babson".

The teachings of Carey have been summarized previously, see above. As discussed above, Carey teaches wash stations 24 f-i for washing test vessels and a re-suspension probes 24c and g for mixing the contents of the cuvettes. Carey also teaches the transfer shuttle 190 having a projecting member that contacts the cuvette in the holding means and pushes the cuvette from the transport device (holding means). Carey does not teach the wash station is combined with the transfer station, an agitation assembly positioned adjacent the transport device so as to contact the cuvette, or the transfer shuttle having a horizontal support and at least two projecting members, wherein the projecting members project from the horizontal support, wherein the projecting members are spaced far enough apart to accommodate at least one test vessel therebetween.



Babson teaches a multipath access system for use in an automated immunoassay analyzer. The Babson system comprises a transport device having means for holding a plurality of vessels (e.g., loop 202) having a plurality of vessel holding members (e.g., 202a) via a motor (i.e., means for moving the vessel holding means). The transport device moves a plurality of vessels 840 along one or more continuous loops (e.g., 202, 213b, 213,215).

Babson teaches a transfer station in the wash station 214 and shown in detail in Figs. 8A-E. The transfer station includes a "means for moving 850" or shuttle for moving a reaction tube 840 vertically along the vertical direction and out of the vessel holding means 213b into vessel holding means 215, such as shown in FIG. 8A; see also col. 27, line 64- col. 30, line 55.

As to claim 35, Babson also teaches a wash station (214 and 810; Fig. 8A) for washing test vessels positioned therein. The wash station is combined with the transfer station (e.g., 213b). which transfers the tube from the wash station to either the side chain transport device 213' or luminometer chain 215a to a luminometer 216.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the wash station with the transfer station in the system of Carey, like that taught in Babson, so as to increase the throughput of the analyzer system while reducing analyzer footprint by combining two elements into one mechanism.

With respect to claims 36-37, Babson teaches a stationary agitating means (reaction tube shaker bars; not shown; see col. 7, lines 57+) positioned adjacent the

transport device at a location where the vessels in the holding members contact the agitating member when the transport device 213 is moved.

Accordingly, it would have been obvious to one of ordinary skill in the art to use a stationary agitating means positioned adjacent the transport device at a location where the vessels in the holding members contact the agitating member when the transport device is moved in the system of Carey, like that taught by Babson, test vessels are simply and passively bumped by the agitator assembly, thereby agitating the contents without the need for additional moving agitators which can increase operation and manufacturing costs.

Regarding claim 40, Babson teaches the transfer shuttle having a horizontal support 852 and at least two projecting members 853, wherein the projecting members project from the horizontal support (see Fig. 8A), and wherein the projecting members are spaced apart so as to accommodate at least one test vessel therebetween.

Accordingly, it would have been obvious to one of ordinary skill in the art to include two projecting members that project from the horizontal support of Carey's transfer shuttle, like that taught by Babson, since the use of multiple projection members that surround the vessel during transport will increase the lateral stability of the cuvette as is moved using the transfer shuttle.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 27-38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. No claims are allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Kathryn Wright/  
Examiner, Art Unit 1797